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UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	P 5340.11008
First Inventor	Peter S. Shifflett
Title	Apparatus and Method for*
Express Mail Label No.	EL 916899586 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)

2.  Applicant claims small entity status.  
See 37 CFR 1.27.

3.  Specification [Total Pages 14]  
(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4.  Drawing(s) (35 U.S.C. 113) [ Total Sheets 4 ]

5. Oath or Declaration [ Total Pages 2 ]

- a.  Newly executed (original or copy)
- b.  Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
  - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

6.  Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)

- a.  Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
  - i.  CD-ROM or CD-R (2 copies); or
  - ii.  paper
- c.  Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9.  Assignment Papers (cover sheet & document(s))

10.  37 CFR 3.73(b) Statement  Power of Attorney (when there is an assignee)

11.  English Translation Document (if applicable)

12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations

13.  Preliminary Amendment

14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)

15.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)

16.  Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.

17.  Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation  Divisional  Continuation-in-part (CIP) of prior application No. \_\_\_\_\_ / \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

<input type="checkbox"/> Customer Number or Bar Code Label	(Insert Customer No. or Attach bar code later here)			or <input checked="" type="checkbox"/> Correspondence address below	
Name	William A. Birdwell				
Address	Durando Birdwell & Janke, P.L.C. 2929 E. Broadway Blvd.				
City	Tucson	State	AZ	Zip Code	85716
Country	USA	Telephone 520-881-9442		Fax	520-881-9448
Name (Print/Type)	William A. Birdwell	Registration No. (Attorney/Agent)	27,181		
Signature	William A. Birdwell		Date	11/9/01	

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

\*Remotely Sensing Hydrocarbons and Other Pollutants in Vehicle Emissions

JC945 U.S. PTO  
10/60/01JC945 U.S. PTO  
11/09/01

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# FEE TRANSMITTAL

## for FY 2002

Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 446.00)

## Complete if Known

Application Number	
Filing Date	
First Named Inventor	Peter S. Shifflett
Examiner Name	
Group Art Unit	
Attorney Docket No.	P 5340.11008

## METHOD OF PAYMENT (check all that apply)

Check  Credit card  Money Order  Other  None

Deposit Account:

Deposit Account Number 02-2451  
Deposit Account Name

The Commissioner is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
101 740	201 370	Utility filing fee	370
106 330	206 165	Design filing fee	
107 510	207 255	Plant filing fee	
108 740	208 370	Reissue filing fee	
114 160	214 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>		(\$ 370)	

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	24	-20** = 4 x 9 = 36	
Independent Claims	3	- 3** = 0 x 0 = 0	
Multiple Dependent			

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
103 18	203 9	Claims in excess of 20	
102 84	202 42	Independent claims in excess of 3	
104 280	204 140	Multiple dependent claim, if not paid	
109 84	209 42	** Reissue independent claims over original patent	
110 18	210 9	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>		(\$ 36.00)	

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

## Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for <i>ex parte</i> reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 920	217 460	Extension for reply within third month	
118 1,440	218 720	Extension for reply within fourth month	
128 1,960	228 980	Extension for reply within fifth month	
119 320	219 160	Notice of Appeal	
120 320	220 160	Filing a brief in support of an appeal	
121 280	221 140	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,280	241 640	Petition to revive - unintentional	
142 1,280	242 640	Utility issue fee (or reissue)	
143 460	243 230	Design issue fee	
144 620	244 310	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	40
146 740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179 740	279 370	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	
Other fee (specify)			

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$ 40.00)**

SUBMITTED BY		Complete (if applicable)		
Name (Print/Type)	William A. Birdwell	Registration No. (Attorney/Agent)	27,181	Telephone 520-881-9442
Signature	William A. Birdwell		Date 11/9/01	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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**CASE DOCKET NO.:** P 5340.11008

**APPLICANTS:** Peter S. Shifflett, James H. Johnson and Jason K. Webster

**APPLICATION TITLE:** Apparatus and Method for Remotely Sensing Hydrocarbons and Other Pollutants in Vehicle Emissions

### **CERTIFICATE OF MAILING**

I hereby certify that the items listed below are being deposited with the United States Postal Service utilizing the "**EXPRESS MAIL POST OFFICE TO ADDRESSEE**" service, mailing label number **EL 916899586 US**, under 37 CFR 1.10 in an envelope addressed to: **BOX PATENT APPLICATION, Commissioner for Patents, Washington, D.C. 20231**, on the 9th day of November, 2001.



Alice Vanicek  
Alice Vanicek

Enclosed are:

- Itemized return postcard.
- A check in the amount of \$446 to cover the filing and recordation fees.
- Provisional Application for Patent Cover Sheet
- Utility Patent Application Transmittal sheet.
- Fee Transmittal sheet (in duplicate).
- Declaration for Utility or Design Patent Application.
- Power of Attorney or Authorization of Agent.
- Statement Under 37 CFR 3.37(b).
- An assignment agreement and recordation cover sheet.
- A specification of the invention and claims.
- Four sheets of drawings.
- photographs submitted as informal drawings for reference purposes only.
- An information disclosure statement.
- Copy of priority document.